

§ 82.17 What types of information could be used to supplement or substitute for individual monitoring data?

Three types of information could be used:

(a) Monitoring data from co-workers, if NIOSH determines they had a common relationship to the radiation environment; or,

(b) A quantitative characterization of the radiation environment in which the covered employee worked, based on an analysis of historical workplace monitoring information such as area dosimeter readings, general area radiation and radioactive contamination survey results, air sampling data; or,

(c) A quantitative characterization of the radiation environment in which the employee worked, based on analysis of data describing processes involving radioactive materials, the source materials, occupational tasks and locations, and radiation safety practices.

§ 82.18 How will NIOSH calculate internal dose to the primary cancer site(s)?

(a) The calculation of dose from ingested, inhaled or absorbed radioactivity involves the determination of the types and quantities of radionuclides that entered the body. NIOSH will use the results of all available bioassay monitoring information as appropriate, based on assessment of the technical characteristics of the monitoring program. If bioassay monitoring data are unavailable or inadequate, the dose reconstruction will rely on the results of air sampling measurements, radiation sources, work processes and practices, and incidents involving radiation contamination, as necessary.

(b) NIOSH will calculate the dose to the organ or tissue of concern using the appropriate current metabolic models published by ICRP. Using data available to NIOSH, the models will be based on exposure conditions representative of the work environment. When NIOSH cannot establish exposure conditions with sufficient specificity, the dose calculation will assume exposure conditions that maximize the dose to the organ under consideration. When the cancer covered by a claim is in a tissue not covered by existing ICRP

models, NIOSH will use the ICRP model that best approximates the model needed, while giving the benefit of the doubt to the claimant. For internal exposures, NIOSH will select the highest dose estimate from among the modeled organs or tissues that do not concentrate the radionuclide.

(c) Internal doses will be calculated for each year of exposure from the date of initial exposure to the date of cancer diagnosis.

§ 82.19 How will NIOSH address uncertainty about dose levels?

The estimate of each annual dose will be characterized with a probability distribution that accounts for the uncertainty of the estimate. This information will be used by DOL in the calculation of probability of causation, under HHS guidelines for calculating probability of causation estimates at 42 CFR 81. In this way, claimants will receive the benefit of the doubt in cases in which the actual dose may have exceeded the best estimate calculated by NIOSH.

Subpart D—Reporting and Review of Dose Reconstruction Results

§ 82.25 When will NIOSH report dose reconstruction results, and to whom?

NIOSH will report dose reconstruction results to DOL and to the claimant, as provided for under § 82.10. Draft results will be reported to the claimant upon tentative completion of the dose reconstruction. Final results will be reported to the claimant, DOL and DOE after NIOSH receives certification from the claimant that the claimant has completed providing information to NIOSH for the dose reconstruction (Form OCAS-1).

§ 82.26 How will NIOSH report dose reconstruction results?

(a) NIOSH will provide dose reconstruction results to the claimant, DOL, and DOE in a report: “NIOSH Report of Dose Reconstruction under EEOICPA.” The report itself will not provide information on probability of causation, which DOL must calculate to determine a recommended decision on the claim.

(b) The report will include the following information, as relevant:

(1) Annual dose estimates (or a fraction thereof) related to covered employment for each year from the date of initial radiation exposure at a covered facility to the date of cancer diagnosis;

(2) Separate dose estimates for acute and chronic exposures, different types of ionizing radiation, and internal and external doses, providing internal dose information only for the organ or tissue relevant to the primary cancer site(s) established in the claim;

(3) Uncertainty distributions associated with each dose estimated, as necessary;

(4) Explanation of each type of dose estimate included in terms of its relevance for estimating probability of causation;

(5) Identification of any information provided by the claimant relevant to dose estimation that NIOSH decided to omit from the basis for dose reconstruction, justification for the decision, and if possible, a quantitative estimate of the effect of the omission on the dose reconstruction results; and

(6) A summary and explanation of information and methods applied to produce the dose reconstruction estimates, including any factual findings and the evidence upon which those findings are based.

(c) As provided under § 82.10(l), NIOSH staff will conduct a closing interview with claimants to explain the dose reconstruction report.

§ 82.27 How can claimants obtain reviews of their NIOSH dose reconstruction results by NIOSH?

(a) Claimants can seek reviews of their dose reconstruction through the processes established by DOL under 20 CFR 30. DOL will request NIOSH to review dose reconstructions under the following conditions, as provided under 20 CFR 30.318:

(1) DOL may determine that factual findings of the dose reconstruction do not appear to be supported by substantial evidence; or,

(2) Although the methodology established by HHS under this Part is binding on DOL, DOL may determine that arguments concerning the *application*

of this methodology should be considered by NIOSH.

(b) NIOSH may review completed dose reconstructions on its own initiative and with the assistance of DOL to identify denied claims when either of the following circumstances arise:

(1) NIOSH obtains records or information on radiation exposures of DOE or AWE employees that could substantially increase the level of radiation doses estimated in the completed dose reconstructions; or

(2) NIOSH changes a scientific element underlying dose reconstructions according to the provisions of Subpart E of this rule and the change could substantially increase the level of radiation doses estimated in the completed dose reconstructions.

(c) When NIOSH completes the review of a dose reconstruction, NIOSH will provide a report describing the basis for the review, the methods employed in the review, and the review findings to the claimant, DOL, and DOE.

§ 82.28 Who can review NIOSH dose reconstruction files on individual claimants?

(a) Claimants and DOL will be provided individual dose reconstruction files, upon request. Claimants should note, however, that a complete summary of the data and methods used in a dose reconstruction will be included in the “NIOSH Report of Dose Reconstruction under EEOICPA”.

(b) Researchers and the public will be provided limited access to NIOSH dose reconstruction files, subject to provisions and restrictions of the Privacy Act for the protection of confidential information on individuals.